

AMENDMENTS TO THE SPECIFICATION:

Pages 7-8, amend paragraph [0015] as:

[0015] In an OFDM based cellular system, suppose that there are J cells in a cluster and cell j is the desired cell to be searched for. The J cells are differentiated by using J different cell codes, denoted by $C^{(j)}[k]$, $k = 0 \sim L_C - 1$, $i = 1 \sim J$, where L_C is the length of the cell codes. The length L_C is chosen such that unique cell identification in every cluster of J cells can be achieved, and it is not necessary to be identical to the number of sub-carriers (K). To reduce the complexity of cell identification, every cell code can be further represented by two or more sequences. Without loss of generality, let a cell code be represented by two sequences $P^{(j)}[k]$, $k = 0 \sim L_P - 1$, $i \in \{1, 2, \dots, P - 1\}$, and $Q^{(j)}[k]$, $k = 0 \sim L_Q - 1$, $l \in \{1, 2, \dots, Q - 1\}$, where L_P and L_Q are the length of $P^{(j)}[k]$ and $Q^{(j)}[k]$, respectively, and $P \cdot Q \geq J$. Furthermore, let the cell code $C^{(j)}[k]$ associated with cell j be represented by the two sequences $P^{(j)}[k]$ and $Q^{(j)}[k]$. Then, identification of the cell code $C^{(j)}[k]$ is ~~turn~~ turned into the problem of identifying both the sequences $P^{(j)}[k]$ and $Q^{(j)}[k]$.